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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,364	04/29/2004	James Wlos	4023	3363
31424	7590	08/08/2005	EXAMINER	
BABCOCK IP LLC 24154 LAKESIDE DRIVE LAKE ZURICH, IL 60047			LEON, EDWIN A	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

A

Office Action Summary	Application No.	Applicant(s)	
	10/709,364	WLOS ET AL.	
	Examiner	Art Unit	
	Edwin A. León	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's Terminal Disclaimer and Amendment filed June 1, 2005 in which Claims 26 and 28 have been amended, have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10, 12-24 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (U.S. Patent No. 4,963,105) in view of D'Addario (U.S. Patent No. 6,568,964). With regard to Claims 1-3, 5-8, 10, 12-13 and 15, Lewis et al. discloses a connector interface for connecting to a cylindrical female connector body (21) having an outer diameter surface and a bore (Fig. 1) with an inner diameter surface (25), comprising: a male connector body (12), a front end portion of a sleeve (16) of the male connector body (12) adapted to insert within the bore (Fig. 1); and a first spring (32). See Figs. 1-2.

However, Lewis et al. doesn't show a plurality of outer spring fingers biased for an interference fit upon the outer diameter surface, the first spring located on an outer diameter of the sleeve, the first spring is located by a first groove formed in the outer diameter of the sleeve and each of the plurality of spring fingers having an angled face.

D'Addario discloses an interface having a plurality of outer spring fingers (32) biased for an interference fit upon an outer diameter surface, and each of the plurality of outer spring fingers (32) having an angled face (36). See Figs. 1-2.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the interface of Lewis et al. by including a plurality of outer spring fingers biased for an interference fit upon an outer diameter surface, and each of the plurality of outer spring fingers having an angled face as taught in D'Addario in order to reduced the likelihood of intermittent electrical discontinuity. (D'Addario; Column 1, Lines 15-17)

The combination of Lewis et al. and D'Addario discloses the claimed invention except for the first spring located on an outer diameter of the sleeve and the first spring is located by a first groove formed in the outer diameter of the sleeve. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the first spring located on an outer diameter of the sleeve and the first spring is located by a first groove formed in the outer diameter of the sleeve, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

With regard to Claim 4, Lewis et al. discloses the first spring (32) being a canted coil spring (32). See Figs. 1-2.

With regard to Claim 9, Lewis et al. discloses the first spring (32) being dimensioned whereby the first spring (32) elastically deforms between the sleeve (16) and the inner diameter surface (25) upon mating of the male connector body (12) with the female connector body (21). See Figs. 1-2.

With regard to Claim 14, Lewis et al. discloses an inner conductor contact (13) positioned coaxially within a sleeve (16) bore by an insulator (15). See Figs. 1-2.

With regard to Claim 16, Lewis et al. discloses the sleeve (16) is formed as a separate component press-fit into place within the male connector body (12). See Figs. 1-2.

With regard to Claim 17, Lewis et al. discloses the sleeve (16) being press-fit within the male connector body (12) up to an internally projecting shoulder (17) of the male connector body (12). See Figs. 1-2.

With regard to Claims 18-24 and 26, Lewis et al. discloses a connector interface between a female connector (21) and a male connector (12) and a first spring (32), the sleeve (16) adapted for insertion within a bore (Fig. 1) of the female connector (21) whereby the spring (32) is deformed between the sleeve (16) and an inner diameter surface (25) of the bore (Fig. 1). See Figs. 1-2.

However, Lewis et al. doesn't show a plurality of outer spring fingers biased for an interference fit upon the outer diameter surface, the first spring located on an outer diameter of the sleeve, the first spring is located by a first groove formed in the outer

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diameter of the sleeve and each of the plurality of outer spring fingers having an angled face, and a spring ring, comprising: a collar adapted for mounting within a male connector and a plurality of deflectable protrusions extending from the collar.

D'Addario discloses an interface having a spring ring (14), comprising: a collar (14) adapted for mounting within a male connector (10) and a plurality of deflectable protrusions (outer spring fingers) (32) extending from the collar (14) biased for an interference fit upon an outer diameter surface, and each of the plurality of outer spring fingers (32) having an angled face (36). See Figs. 1-2.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the interface of Lewis et al. by including a plurality of outer spring fingers biased for an interference fit upon an outer diameter surface, and each of the plurality of outer spring fingers having an angled face, a spring ring, comprising: a collar adapted for mounting within a male connector and a plurality of deflectable protrusions extending from the collar as taught in D'Addario in order to reduced the likelihood of intermittent electrical discontinuity. (D'Addario; Column 1, Lines 15-17)

The combination of Lewis et al. and D'Addario discloses the claimed invention except for the first spring located on an outer diameter of the sleeve and the first spring is located by a first groove formed in the outer diameter of the sleeve. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the first spring located on an outer diameter of the sleeve and the first spring is located by a first groove formed in the outer diameter of the sleeve, since it has been

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held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

The limitation "the spring ring is formed by one of machining, stamping, forming, and injection molding" has been given little patentable weight since the method of forming the device is not germane to the issue of patentability of the device itself.

With regard to Claim 27, D'Addario discloses the deflectable protrusions (32) being spring fingers (32). See Figs. 1-2.

With regard to Claim 28, D'Addario discloses the mounting of the collar (14) being via a press-fit upon a sleeve (12) of the male connector (10). See Figs. 1-2.

4. Claims 11 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (U.S. Patent No. 4,963,105) in view of D'Addario (U.S. Patent No. 6,568,964) and Applicant's admitted prior art. The combination of Lewis et al. and D'Addario discloses the claimed invention as shown above except for the female connector being one of an SMA and a Type N connector.

Applicant's admitted prior art discloses the use of Type N connectors. See Page 1, Paragraph 0004 and Page 2, Paragraph 0006.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the interface of Lewis et al. and D'Addario by using Type N connectors as taught in Applicant's admitted prior art in order to make the connector more versatile.

Response to Arguments

5. Applicant's arguments filed June 1, 2005 have been fully considered but they are not persuasive. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, In this case, it is the Examiner's opinion that any one with ordinary skill in the art would find obvious to modify the interface of Lewis et al. by including a plurality of outer

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spring fingers biased for an interference fit upon an outer diameter surface, and each of the plurality of outer spring fingers having an angled face as taught in D'Addario in order to reduced the likelihood of intermittent electrical discontinuity. Furthermore, Applicant is reminded that the Abstract of the Lewis et al. reference does not mentioned anything about the connector not suffering from intermittent electrical discontinuity as mentioned in Applicant's remarks.

In response to Applicant's arguments regarding Claims 1-10 and 12-24 that the combination of Lewis et al. and D'Addario doesn't show the first spring located on an outer diameter of the sleeve and the first spring is located by a first groove formed in the outer diameter of the sleeve. It is the Examiner's opinion that any one with ordinary skill in the art would find obvious to rearrange the parts of the connector and therefore the Examiner does not consider the limitation to define any novel patentable feature.

6. Applicant's arguments with respect to claims 11 and 25-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (571) 272-2008. The examiner can normally be reached on Monday - Friday 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571-272-2800, extension 33. The fax

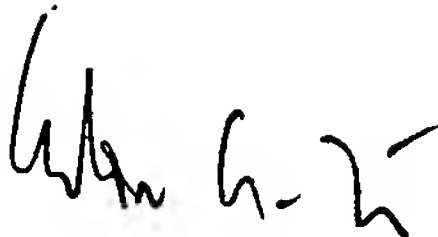
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phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HUOT NGUYEN
PRIMARY EXAMINER



Edwin A. Leon
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EAL
July 29, 2005